Performance Architecture and the 7th Interrogative

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  - BA, EA, SOA, programs, implementation, strategy and training
  - 35+ years experience in distributed systems, software and architecture
- Author
  - Orbus White Papers
    - Five Rules for Effective Architecture Models
    - Achieving Coherence in Architecture Models
    - Positioning Business and Enterprise Architecture
    - The 7th Interrogative
    - *Coming in 2014*
      - Improving your Architecture Skills – Critical Thinking
      - Integrating Business Architecture and Business Process
      - Improving your Architecture Skills - Abstraction
  - IDC CIO Agenda Research – EA for the 3rd Platform
  - Cutter Consortium - Business and Enterprise Architecture
  - Books
    - SOA Applied: Architecture and Design Strategies, 2008, Wiley
    - Developing e-Business Systems and Architecture: A Manager's Guide, 2000, Morgan-Kaufman
    - Integrating CORBA and COM Applications, 1998, Wiley
- Thought Leadership
  - Business Architecture Guild – VP, Founding Member, BIZBOK, EABOK, BABOK contributor
  - Penn State Center for EA Education – Advisor Board; SOA Institute – Editorial Director
  - Standards: OMG, The Open Group

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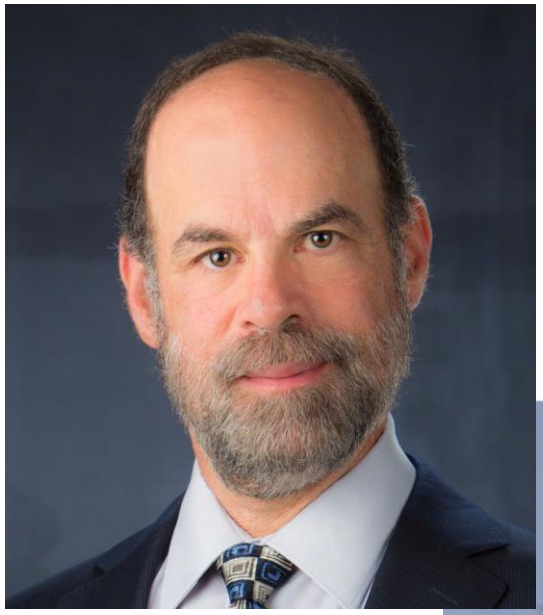


Basic Investigation Techniques

- The **Five Ws**, **Five Ws and one H**, or the **Six Ws** are questions whose answers are considered basic in information-gathering. They are often mentioned in journalism, research, and police investigations. They constitute a formula for getting the complete story on a subject.
    - **Who** is it about?
    - **What** happened?
    - **Where** did it take place?
    - **When** did it take place?
    - **Why** did it happen?

- Some authors add a sixth question, “how”, to the list, though "how" can also be covered by "what", "where", or "when”
- **How** did it happen?

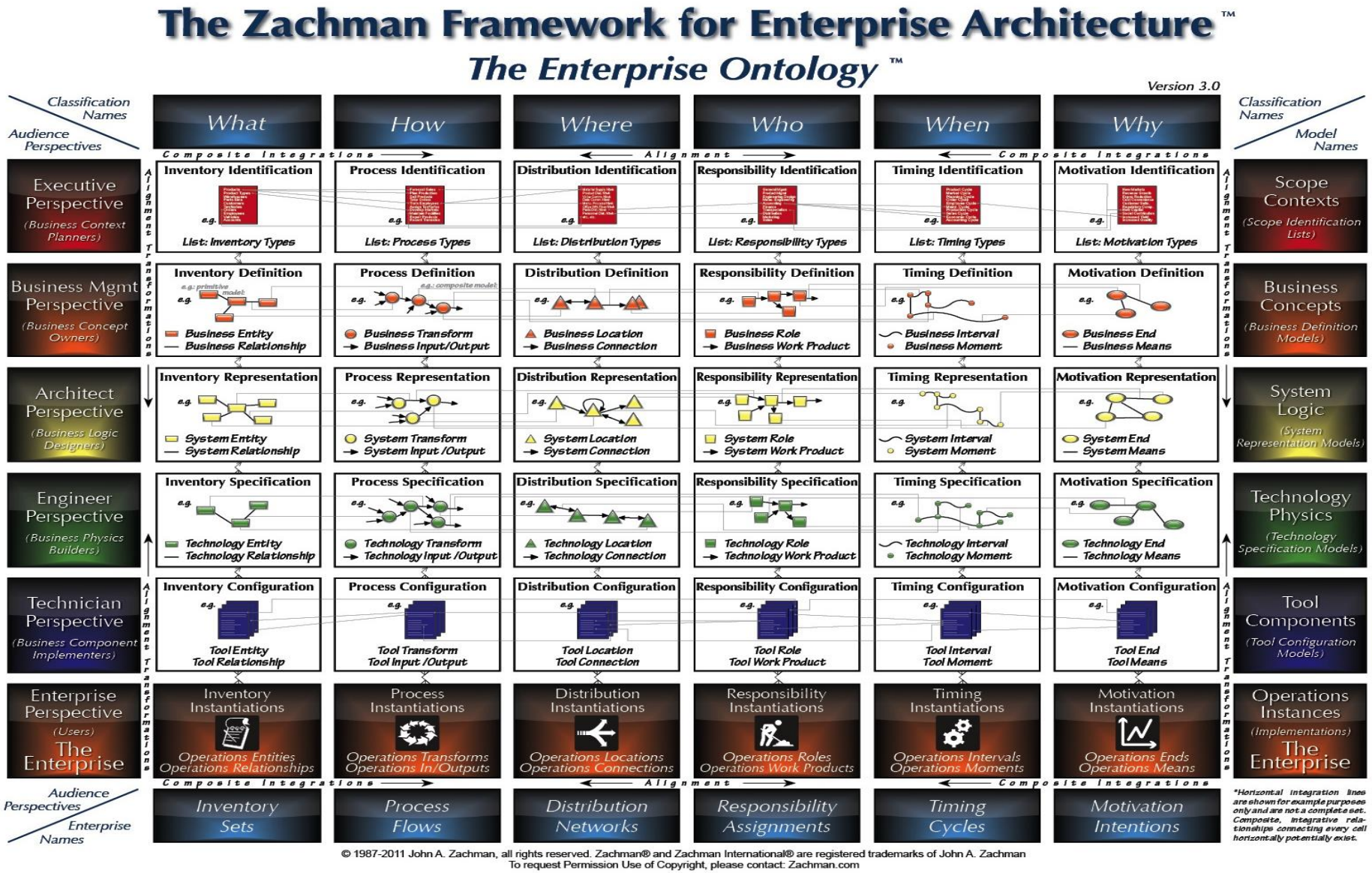
Source: Wikipedia

The Six Interrogatives in BI

Basic Interrogative	Business Object Category
Who produces the data we are going to use to measure performance?	**Parties** (**Persons**, **Organizations**, etc.) through their activities, produce and consume the data we are going to use to measure performance.
What is being manipulated or exchanged to produce the measurable performance?	**Products** (**Goods** and/or **Services**) are produced and consumed by activities to produce the data used to measure performance.
How are the data values that measure performance produced?	**Activities** (**Exchanges**, **Processes**, etc.) are the ways and means by which the data is produced that is used to measure performance.
When does the activity take place and for how long is the performance measured?	**Events** (at **Points in Time** and/or over **Periods of Time**) are the occurrences that produce the data used to measure performance times and durations.
Where does the activity used to measure performance take place?	**Locations** (**Addresses**, **Placements**, etc.) orient the activities that contribute to the production of the data used to measure performance in real (geographic) or virtual space.
Why do we believe the data we are using actually measure performance?	**Motivators** (**Plans**, **Rules**, etc.) designed to influence or control behavior provide a rationale for the production of the data used to measure performance.

Source: Wayne Kurtz

The Zachman Framework



Source: Zachman International

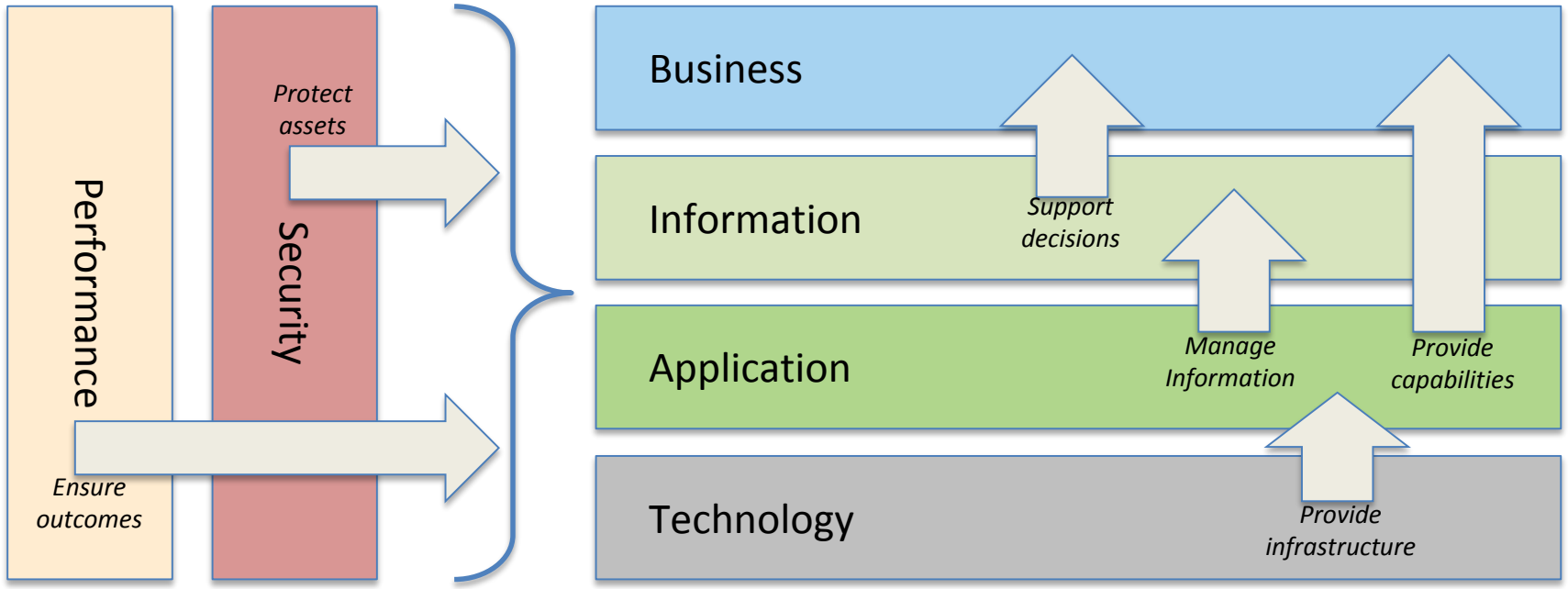
The 7th Interrogative – How Well?

- But, we also need to know how well things are working
  - How is an application performing?
  - How is a process performing? Is it meeting its objectives?
  - How is the business performing? Is it meeting its objectives? Is it achieving its desired outcome?

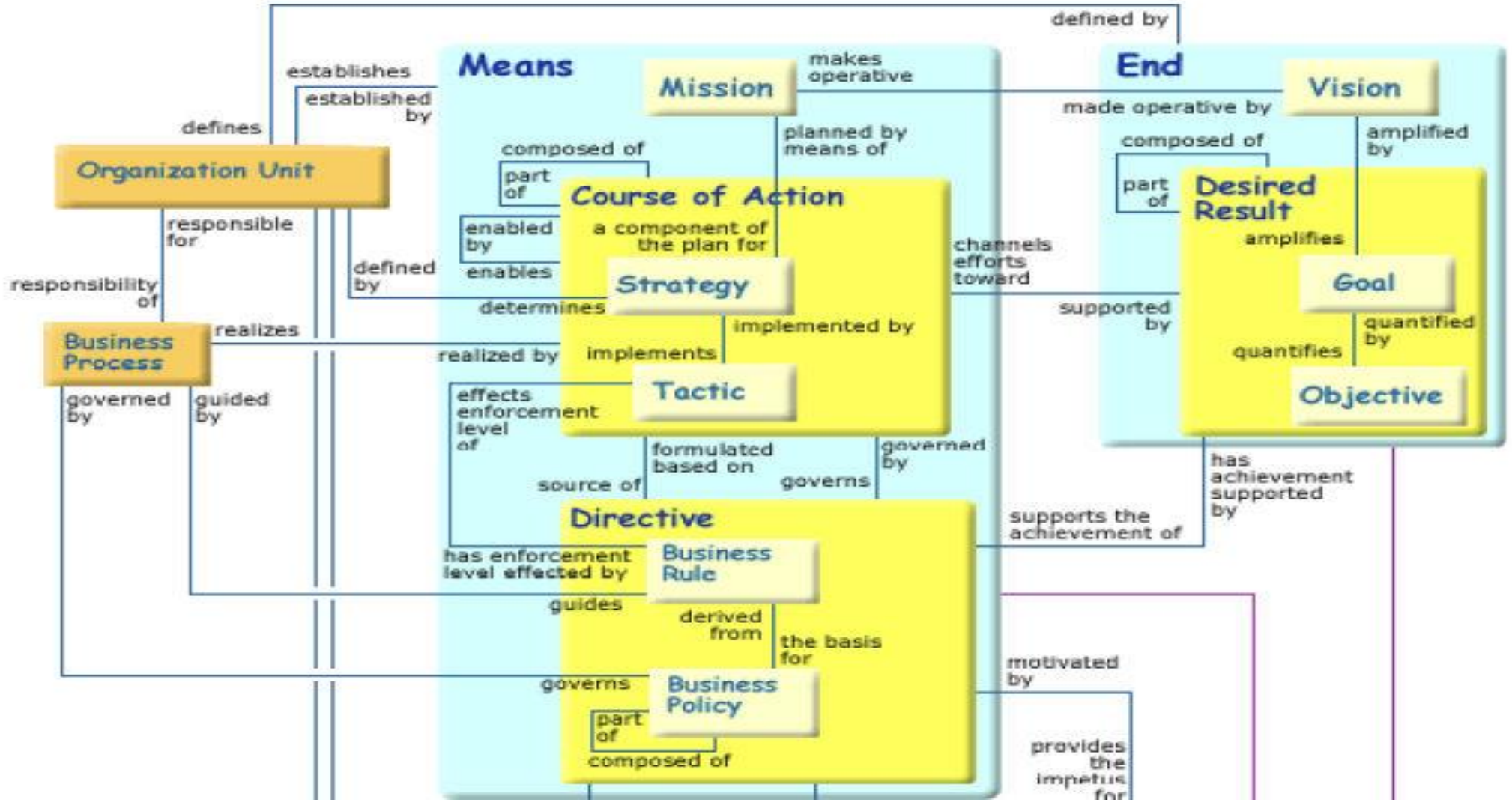
- With the advances in BI and Big Data / Analytics
  - The cost of storage has dropped incredibly
  - The amount of new data has increased exponentially
  - The cost of analytics has decrease tremendously

- We have an opportunity to not only figure out better ways of marketing, fraud detection, etc, but also to…
- Provide decision makers with information about how well the business is performing

Enterprise Architecture Domains and Aspects

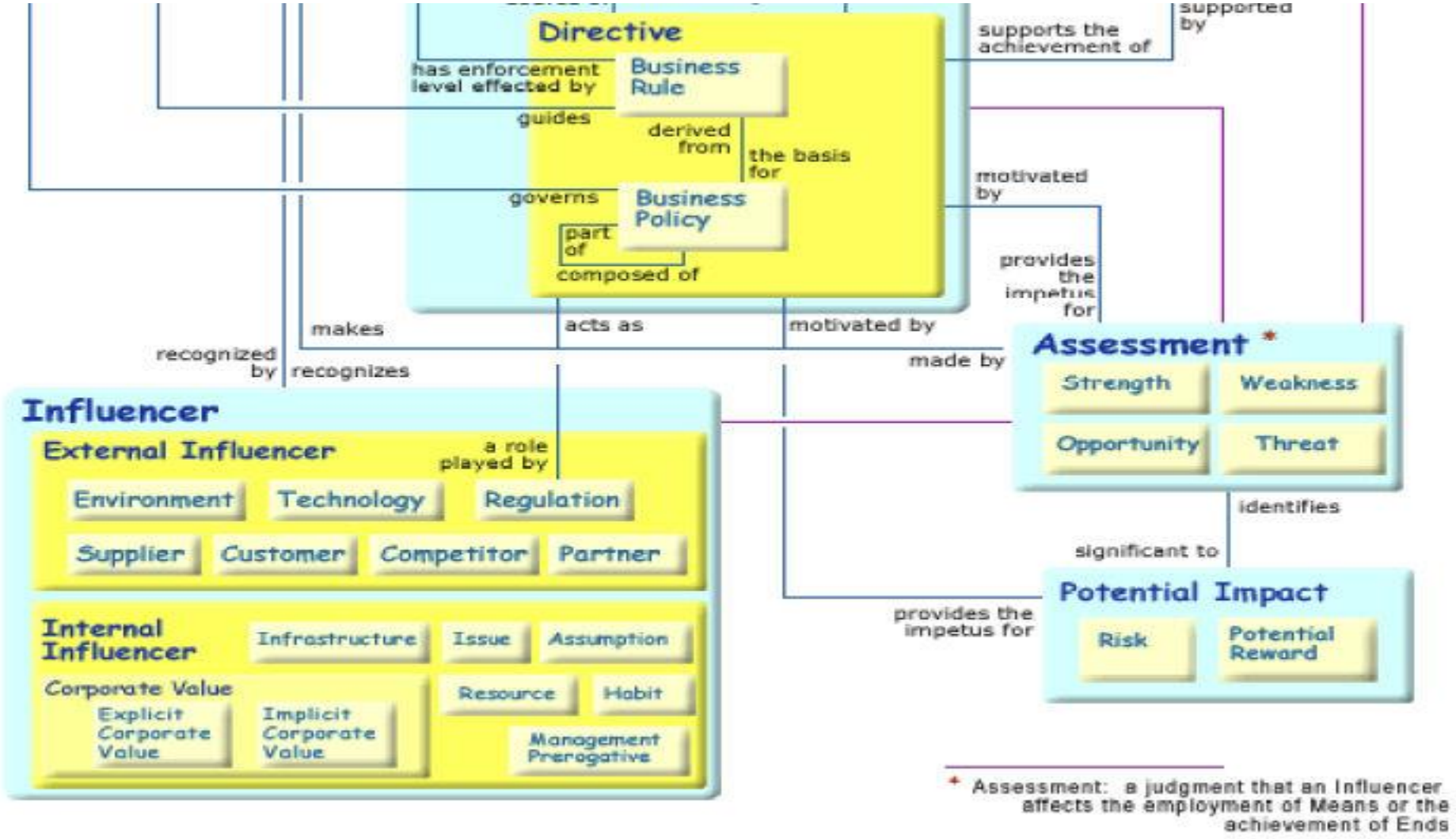


Business Motivation Model



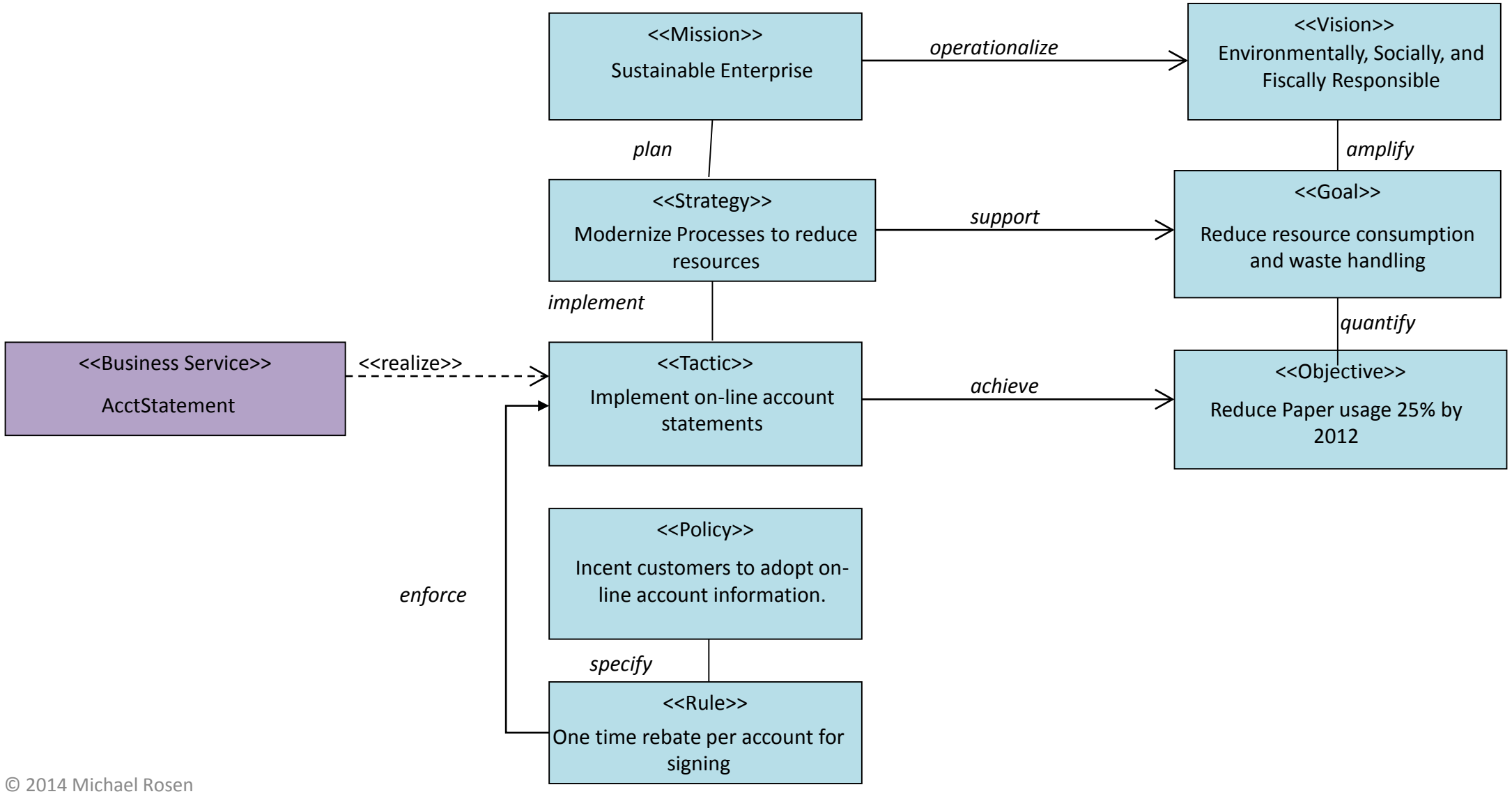
Source: OMG

BMM Influencers

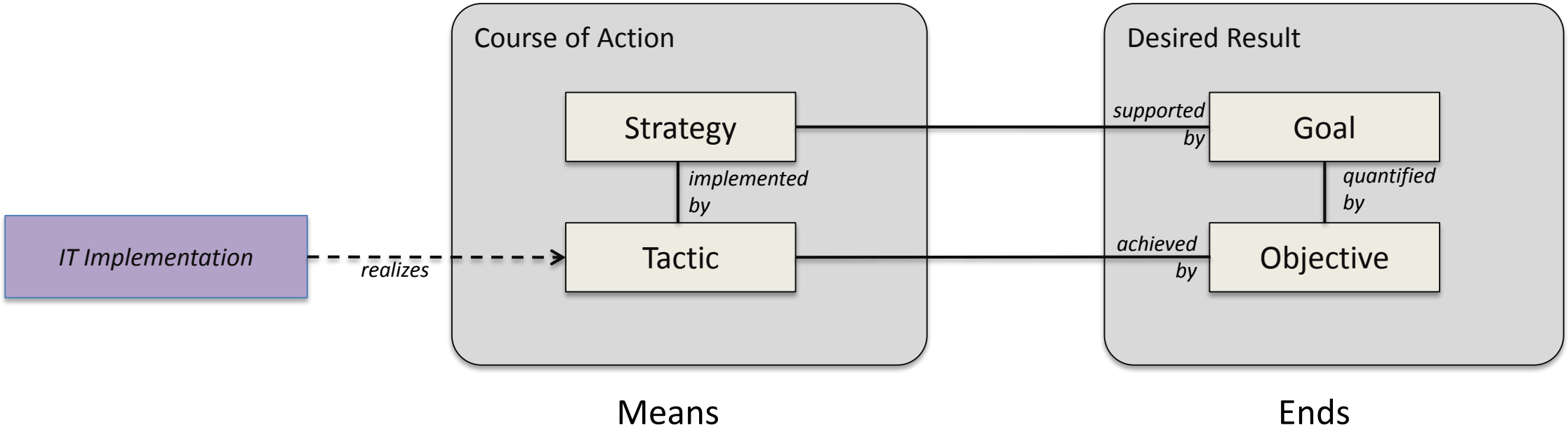


Source: OMG

Enterprise Level Example



BMM Subset

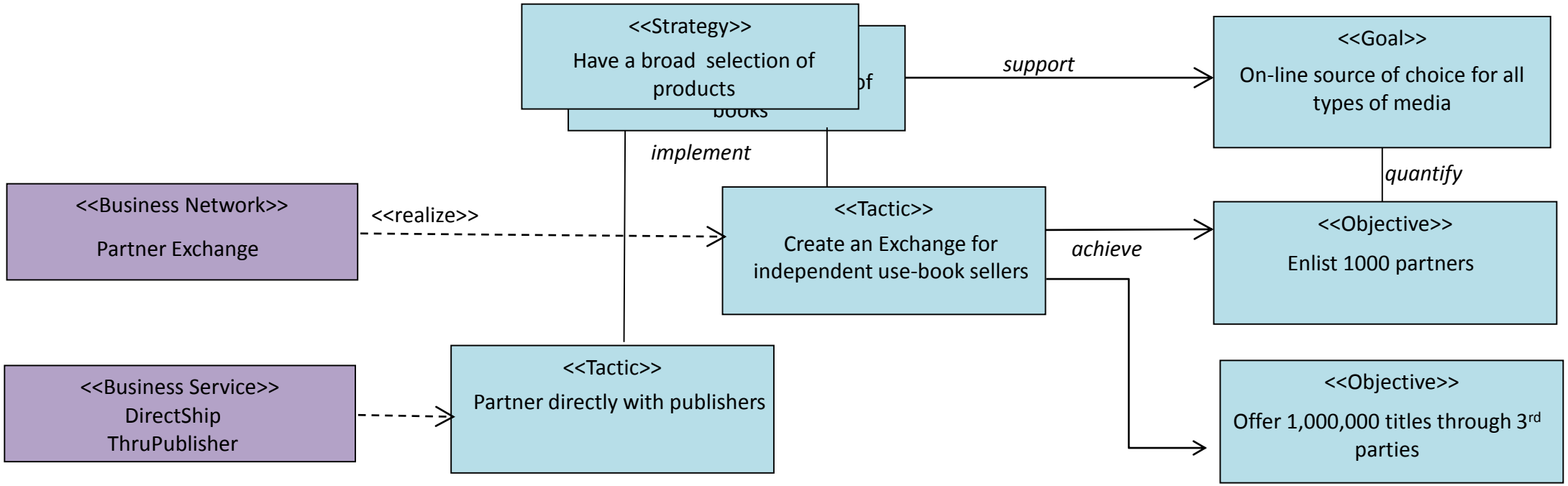


“SMART” Objectives

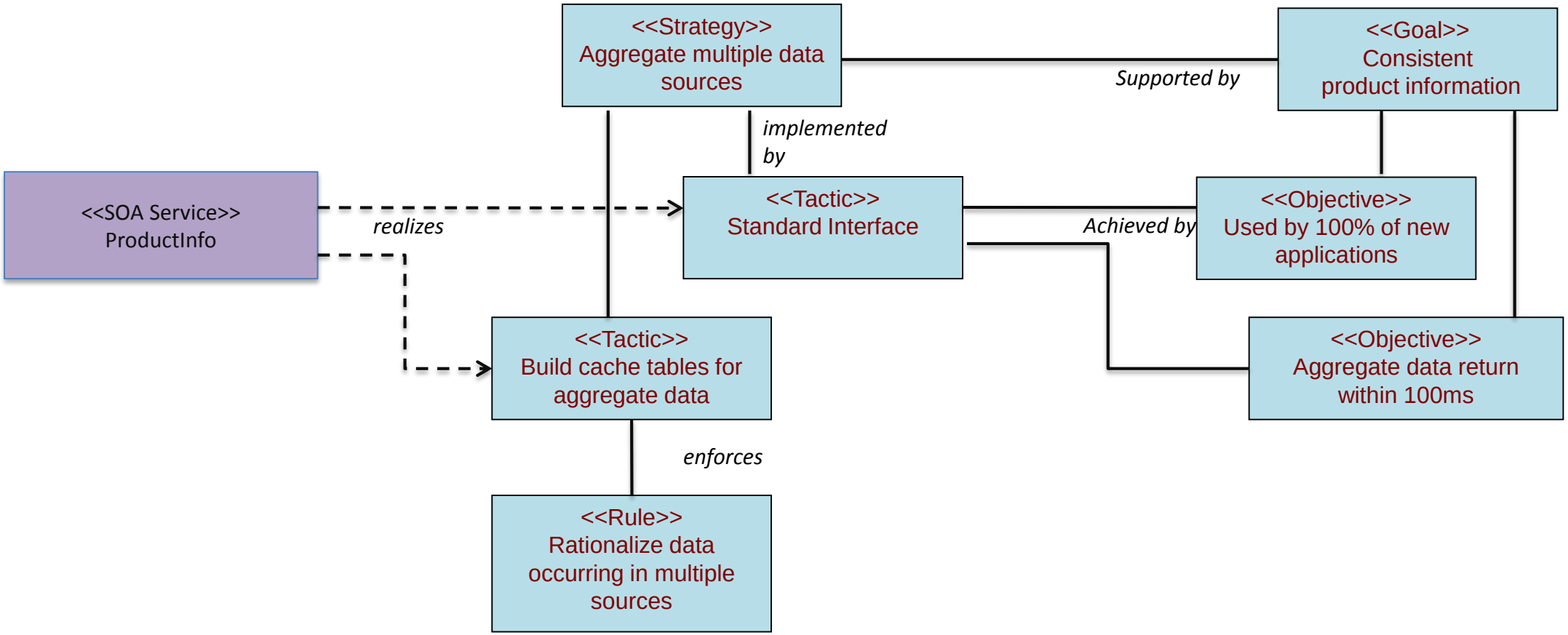
Specific	Clearly define what needs to be achieved in the business
Measurable	Quantified through clear metrics for success
Actionable	Clear segmentation of problem that provides basis for determining elements and plans for the solution
Realistic	Problem can be solved within the bounds of physical reality, time, and cost constraints
Time-Bound	Clear statement of when the solution opportunity expires

Source: TOGAF

Business Unit Level Example



Implementation Level Example

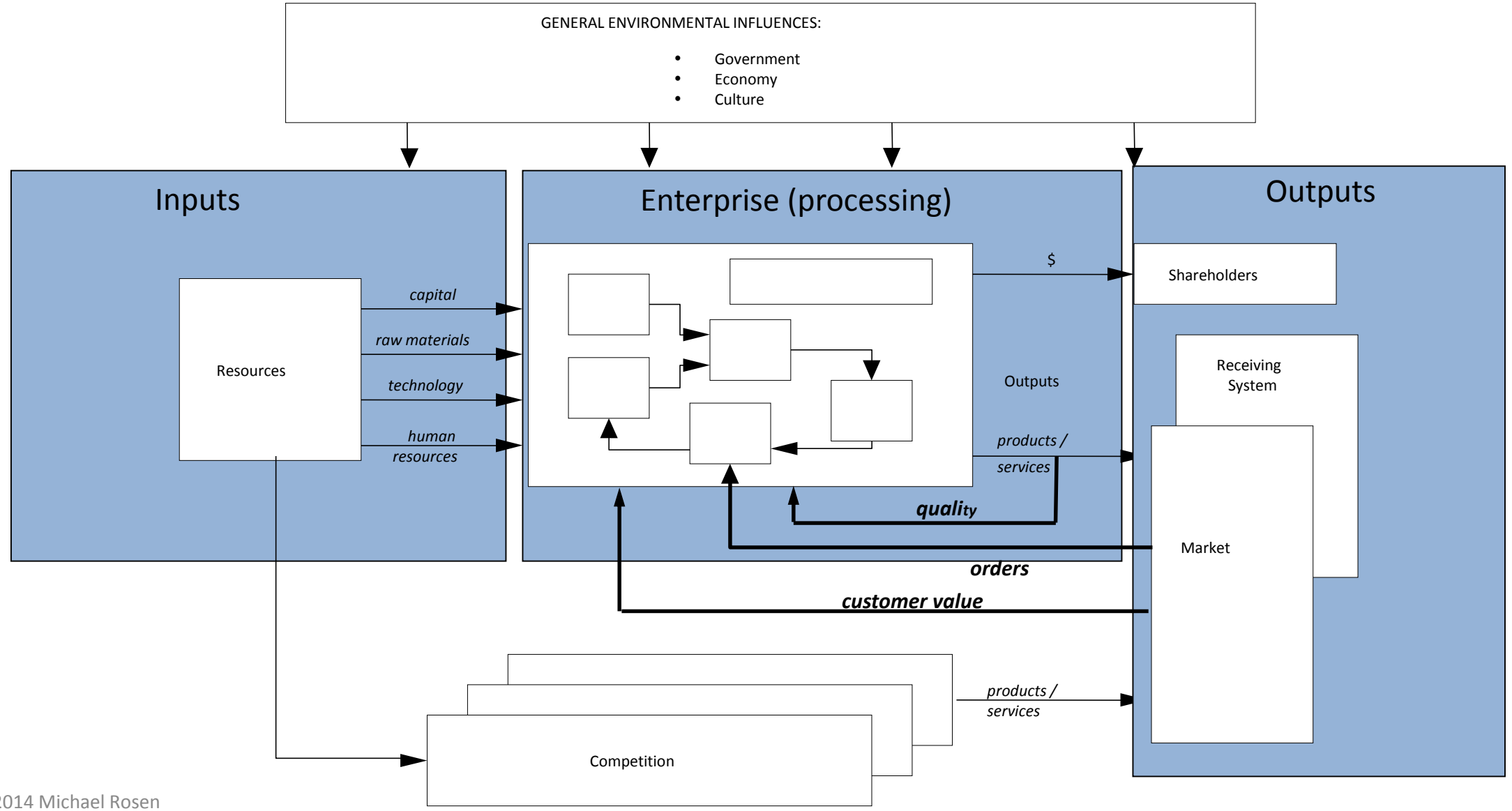


Business / IT Alignment

- Determine Business Goals
- Articulate how the goals will be achieved
- Establish SMART objectives
- Link specific IT Implementations to achieving objectives and goals

- Business / IT Alignment doesn't get any more explicit than that!

Rummler-Brache Enterprise Feedback Model



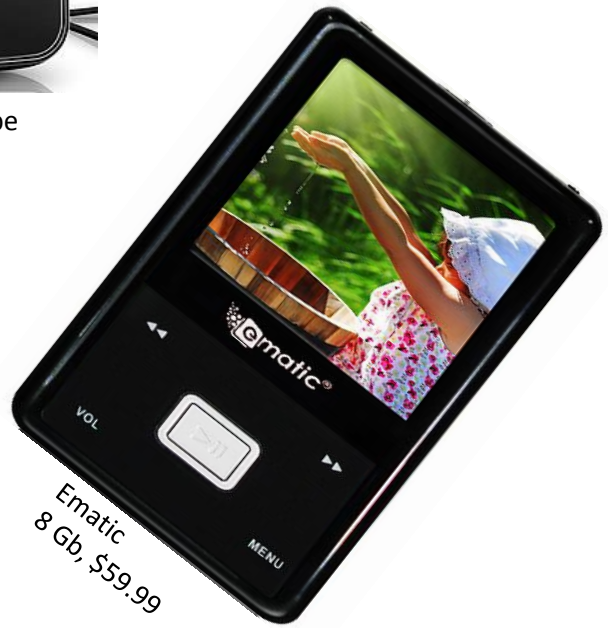
2001 Pontiac Aztec

TIME

[The 50 Worst Cars of All Time]

MP3 Players

Phillips GoGear Vibe
8 Gb, $79.99

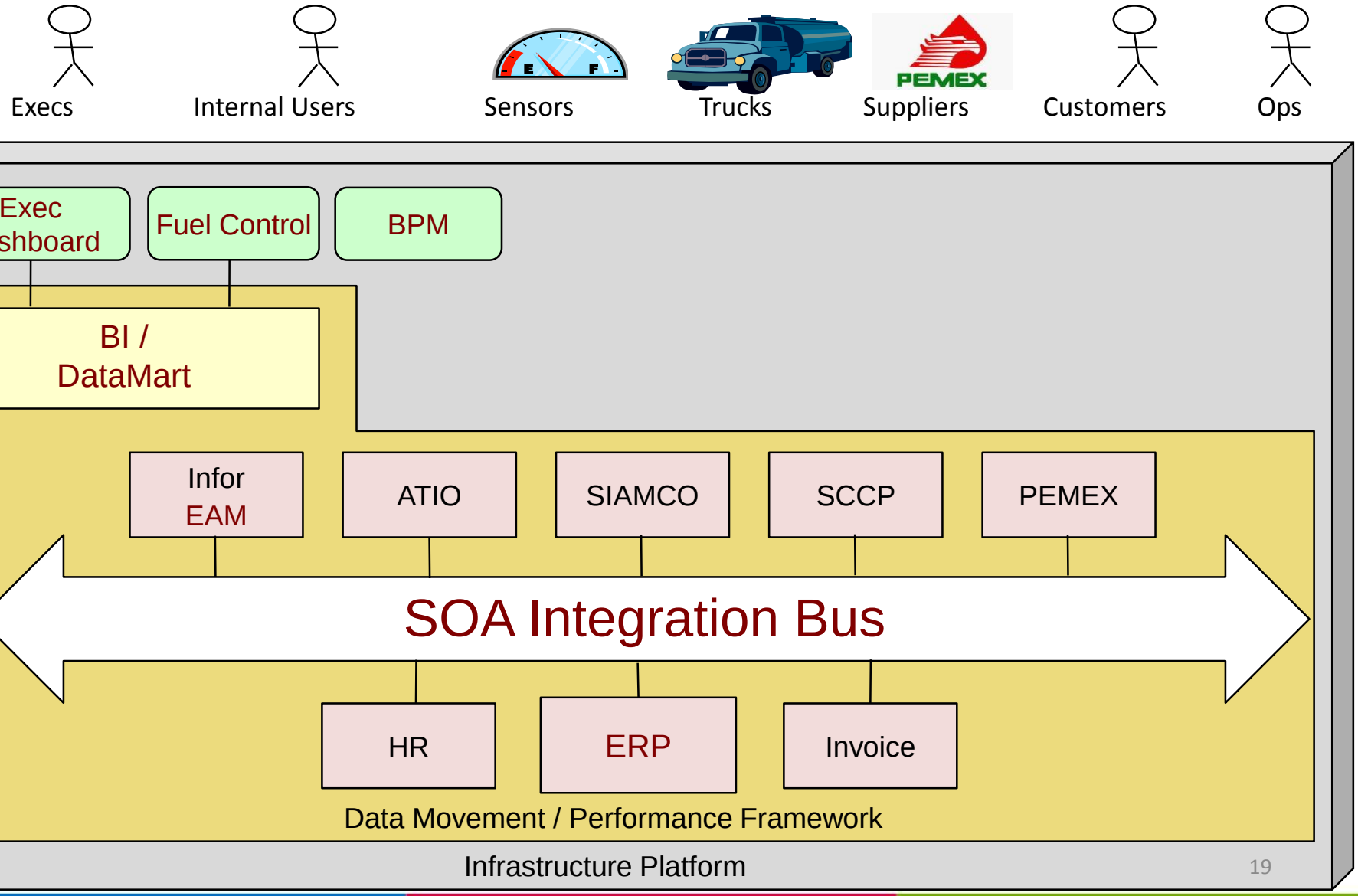


Ematic
8 Gb, $59.99

Apple iPod Nano 5th G
8 Gb, $149.99

Zen Mosaic EZ300
8 Gb, $69.99

Conceptual Statement of Architecture Work



Value Stream
Bus. Motivation Mdl
BPM
Capability Map

Enterprise Info. Mdl
Data Movement

Performance Arch.

Application Arch.
SOA Ref. Model
SOA Catalog

Platform Arch.

Security Architecture

Performance Architecture

- Conceptual framework for thinking about performance
- Model for developing objectives and metrics
- Instrumentation at every layer
- Common metrics collection and storage framework
- Common metrics ETL
- Integration with DW, BI, BDA

Any Questions?

Orbus Software Group

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Download this presentation and accompanying white paper from:
www.orbussoftware.com/downloads